

REMARKS

Status of the claims

Claims 1-18 are currently pending in the application. Claims 1-18 stand rejected. Reconsideration and allowance of all of the pending claims is respectfully requested.

Claims 1, 9, 17, and 18 are currently amended. Support for the amendment to claim 1 may be found at page 13, second full paragraph, of the specification. The amendment to claim 9 is editorial and does not change the scope of the claim. The amendments to claims 17 and 18 makes these claims independent, and also does not change the scope of these claims.

Accordingly, entry of this amendment is respectfully requested.

Double Patenting Rejections (pages 2-4 of the Office Action)

At page 2 of the Office Action, claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting, as unpatentable over claims 1-2 of copending application 10/305,110 and claims 1-18 of copending application number 10/621,412; and claims 1-20 of copending application number 10/621,715 in view of Tam (U.S. Patent No. 5,741,647). This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The applicants respectfully refer the Examiner to the MPEP 804, page 800-17, the relevant section of which is provided below:

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two

pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. If the ODP rejection is the only rejection remaining in the later-filed application, while the earlier-filed application is rejectable on other grounds, a terminal disclaimer must be required in the later-filed application before the rejection can be withdrawn.

Accordingly, the Examiner is respectfully requested to withdraw this rejection.

Claim Rejections - 35 U.S.C. §112, second paragraph (pages 4-5 of the Office Action)

At page 4 of the Office Action, claims 9, 17, and 18 are rejected under 35 U.S.C. §112, second paragraph as indefinite. The Examiner objects to the phrase "the nucleic acid and a sample solution" in claim 9 as lacking proper antecedent basis. Regarding Claims 17 and 18, the Examiner asserts that the claims recite a long series of method steps but do not relate the method steps to the parent claims from which they depend. For the following reasons, the applicants respectfully traverse .

Claim 9 is currently amended to address this rejection. Claims 17 and 18 are also currently amended to become independent claims. It is respectfully submitted that these rejections should now be withdrawn.

Claim Rejections - 35 U.S.C. §103 (pages 5-14 of the Office Action)

1. Mullis in view of Tam

At page 6 of the Office Action, claims 1, 2, 9, 12, 14, 15 and 16 are rejected under 35 U.S.C. §103 as unpatentable over Mullis (U.S. Patent No. 5,187,083) in view of Tam (U.S. Patent No. 5,741,647). For the following reasons, this rejection is respectfully traversed

The claims, as currently amended, recite a method for separating and purifying nucleic acid from a biological sample. Tam is directed to a method for separating and purifying a nucleic acid using an electrophoresis process. Tam does not disclose separating and purifying a nucleic acid from a biological sample. In addition, Tam relates to non-analogous art. Therefore, the Tam disclosure of a 160 μm filter is not relevant to the present invention. The benefits of the presently claimed 10 μm to 500 μm filters are well established by the Applicants' specification. See page 9, third full paragraph, of the present specification.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." See MPEP §2143.03. It is respectfully submitted that the combination of Mullis and Tam does not disclose or suggest all of the limitations of the present claims.

In addition, as mentioned, Tam and Mullis relate to completely different technologies. Accordingly, there is no suggestion or motivation to one of skill in the art to combine these references. Further, it is well established that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." MPEP §2143.

Therefore, in light of the comments set forth above, it is respectfully submitted that this rejection should be withdrawn.

2. Woodard in view of Tam

At page 8 of the Office Action, claims 1, 2, 9, 10, 12, 13, 14, 15 and 16 are rejected under 35 U.S.C. §103 as unpatentable over Woodard (EP 0512767) in view of Tam. For the following reasons, this rejection is respectfully traversed

As discussed above, Tam is directed to an electrophoresis process and does not disclose or suggest a method for separating and purifying a nucleic acid from a biological sample. Woodward and Tam also do not disclose or suggest the 10 μm to 500 μm filters presently claimed. Therefore, for the same reasons as discussed above, Woodard and Tam do not disclose or suggest all of the limitations of the present claims.

Further, because Woodard and Tam also relate to completely different technologies, one of skill in the art would have no motivation or suggestion to combine these references. It is respectfully submitted, that in light of the remarks set forth above, this rejection should now be withdrawn.

3. Woodard in view of Tam and Morishita

At page 11 of the Office Action, claims 3-7 are rejected under 35 U.S.C. §103 as unpatentable over Woodard in view of Tam and further in view of Morishita (U.S. Patent No. 4,118,336). For the following reasons, this rejection is respectfully traversed.

Tam and Morishita do not disclose or suggest separating and purifying a nucleic acid from a biological sample, as presently claimed. Tam and Morishita also do not disclose or

suggest the 10 μm to 500 μm filters presently claimed. Therefore, the combined references do not disclose or suggest all of the limitations of the present claims.

In addition, as discussed above, Tam relates to a completely different technology area from Woodard. There is no motivation or suggestion to one of skill in the art to combine these references. Accordingly, in light of the comments set forth above, it is respectfully submitted that this rejection should be withdrawn.

4. Woodard in view of Tam and Benjamin

At page 12 of the Office Action, claim 11 is rejected under 35 U.S.C. §103 as unpatentable over Woodard in view of Tam and Benjamin (U.S. Patent No. 5,695,946). For the following reasons, this rejection is respectfully traversed.

Tam and Benjamin do not disclose or suggest separating and purifying a nucleic acid from a biological sample as presently claimed. Tam and Benjamin also do not disclose or suggest the 10 μm to 500 μm filters presently claimed. Therefore it is respectfully submitted that the combined references do not disclose or suggest all of the limitations of the present claims. In addition, as discussed above, since Tam relates to a completely different technology area from Woodard, there is no motivation or suggestion to one of skill in the art to combine these references. Accordingly, in light of the comments set forth above, it is respectfully submitted that this rejection should now be withdrawn.

5. Woodard in view of Tam and Heath

At page 13 of the Office Action, claims 17 and 18 are rejected under 35 U.S.C. §103 as unpatentable over Woodard, in view of Tam and Heath (WO 99/13976). For the following reasons, this rejection is respectfully traversed.

Tam and Heath also do not disclose or suggest separating and purifying a nucleic acid from a biological sample. Tam and Heath also do not disclose or suggest the 10 μm to 500 μm filters presently claimed. Therefore, this combination of references does not disclose or suggest all the limitations of the present claims. In addition, as discussed above, one of skill in the art would have no motivation or suggestion to combine Tam with Woodard since they relate to different technologies. Accordingly in light of the comments set forth above, it is respectfully submitted that this rejection should now be withdrawn.

Conclusion

The present application well-describes and claims patentable subject matter. The favorable action of allowance of the pending claims and passage of the application to issue is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark Konieczny (Reg. No. 47,715) at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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